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Federal-State Cooperative

Snow Surveys and Water Supply Forecasts of the Supp

ecasts MAY 1 7 1955 \*

U. S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
AND
OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U.S. Forest Service, National Park Service and other Federal, State and local organizations.

\_\_AS OF\_\_\_\_

#### TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in that bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge River Forecast Center U. S. Weather Bureau 712 Federal Office Building Kansas City 6, Missouri

For current information on local river and flood conditions, reference should be made to the appropriate River District Office listed below:

Meteorologist in Charge......Columbia River and Weather Bureau Office tributaries below Grand 320 Custom House Portland 9, Oregon

Coulee Dam, except the Snake River and tributaries.

Meteorologist in Charge......Oregon and California
Weather Bureau Airport Station Coast drainage, from and Box 1072 Medford, Ore.

including Umpqua River Basin, southward to and including Klamath River and tributaries; the Great Basin in Oregon

State of Oregon

#### FEDERAL-STATE COOPERATIVE

### SNOW SURVEYS AND WATER SUPPLY FORECASTS

FOR

OREGON

Issued

May 9, 1955

Report Prepared by

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Director
Oregon Agricultural Experiment Station



#### FOR OREGON

## MAY 1, 1955

Oregon's water supply outlock has brightened markedly from that of last month because of above normal April snowfall and precipitation coupled with below normal temperatures which delayed snow-melt. Frwer areas of the state will therefore have short water supplies.

- SNOW-COVER: Extensive April storms characterized by low freezing levels and large amounts of precipitation have caused the mountain snow-pack to increase over that reported for last month. This is not a usual occurrence for normally the snow-pack is considerably reduced by April melting conditions. As a result the snow at many survey stations has increased rather than decreased and is now equal to the usual accumulation of April 1.
- SOIL-MOISTURE: Soils under the mountain snow-pack still require above normal amounts of snow-melt water to satisfy their fall dryness. The top 10 to 18 inches of soil have benefitted by very recent rain and light snow-melt.
- RESERVOIRED WATER: Lack of heavy April snow-melt has prevented the usual increases in reservoirs. Stored water in the 26 principal Oregon reservoirs is now 20 percent greater than on April 1. However, the water stored is only 82 percent of the ten year average (1943-52). Eighteen of the 26 reservoirs are one-half full or more.

Stored water is especially low in Antelope, Owyhee, Warmsprings, Agency Valley, Unity, McKay, Emigrant Gap, Cottonwood and Drew Reservoirs.

- PRECIPITATION: State-wide precipitation for April averaged 169 percent of normal (1943-52). Southeastern Oregon was the greatest above normal with 240 percent. The Wallowa Mountain and Upper Deschutes areas received the least with 124 and 129 percent normal respectively.
- STREAMFLOW: Streamflow is expected to be above average (1943-52) in the Willamette, Hood, White, Umatilla and Walla Walla basins. Elsewhere flow will be below average with lowest flows in the Crooked, Silvies, Malheur, Owyhee, Goose Lake and Lost River basins.

Except where stored water is adequate, critical water shortages are still expected in the Owyhee, Malheur, Burnt, Powder, John Day, Crooked, Hyatt-Emigrant, Goose Lake and Interior basins.

April streamflow<sup>2</sup> remained below average except in the Willamette. Lowest reported flows were in the John Day and Owyhee areas where discharge was about half of the 1938-52 average.

<sup>1</sup>From preliminary data furnished by U. S. Weather Bureau, Portland, Oregon. <sup>2</sup>From preliminary data furnished by U. S. Geological Survey, Portland, Oregon.



The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature during the forecast period will be near average. Appreciable deviations from normal of temperature and/or precipitation during the forecast period will correspondingly modify these forecasts.

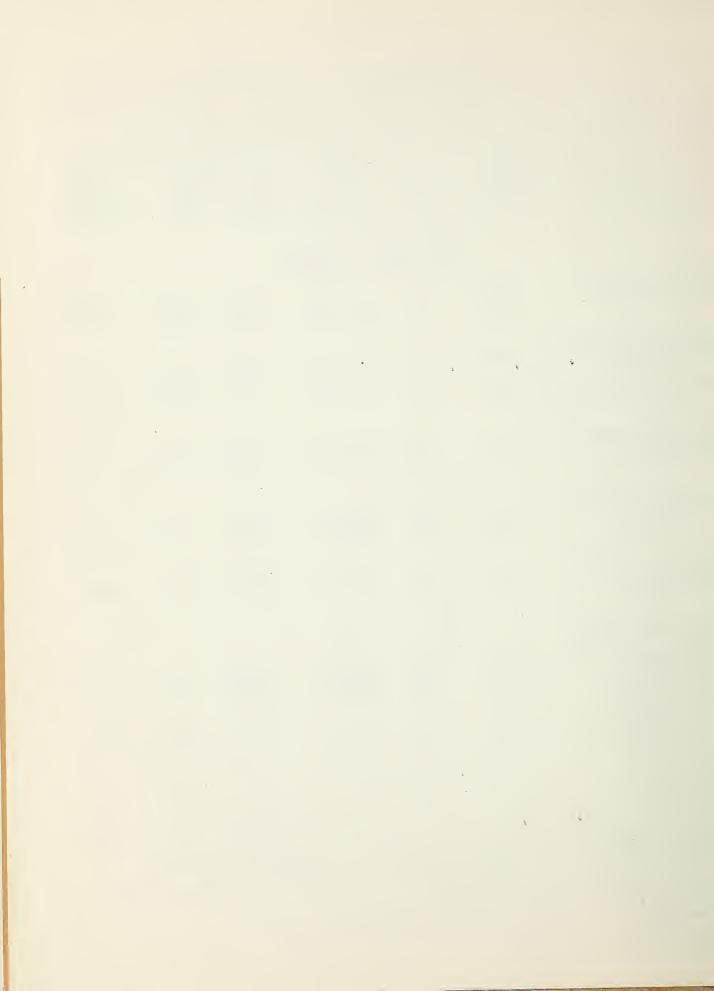
wiese Tolecasus.	Se	easonal Str	eamflow in	Thousands	of Acre F	reet
Basin, Stream	Forecast	%	Fore-			10 - Yr.
and	Runoff	lo-Yr.	cast	Measured	Runoff*	Average
Station	1955	Ave.	Period	1953	1952	1943-52
Columbia River	91500.0	89	Apr-Sept.	91404.0	98619.0	102982.0
nr. The Dalles**			UMBIA BASIN KE IN OREGO			
Owyhee River Basin	-0	,		- 1		104
Owyhee Reservoir	285.0	59	Apr-Sept.	324.6	1434.8	486.4
net inflow	260.0	56	Apr-July	300.8	1432.4	468.4
Malheur River Basin						
Malheur River, nr. Drewsey	45.0	54	Apr-Sept.	106.4	192.2	83.7
Malheur River, N. Fk., at Beulah <sup>2</sup>	39.0	60	Apr-Sept.	80.1	1.22.0	65.2
Burnt River Basin				(- )	<i>(</i>	
Burnt River, nr. Hereford <sup>3</sup>	33.0	71	Apr-Sept.	61.4	65.2	46.5
Powder River Basin						
Powder River,	49.0	74	Apr-Sept.	93.0	88.7	66.0
at Salisbury	48.0	75	Apr-July	90.1	87.1	64.1
Imnaha River Basin	260.0	Ω1.	A 0 t	250.0	101.0	200 0
Imnaha River at Imnaha	200.0	84	Apr-Sept.	359.9	424.3	308.0
Grande Ronde River						
Basin	ז ח ל	00	<b>1 2 1</b>	<b>71</b>	(	(
Wallowa River, E.Fk.,	10.5	90	Apr-Sept.	14-4	12.6	11.6
nr. Joseph <sup>4</sup>	8.5 39.0	91	Apr-July	10.9	10.3	9.3
Hurricane Creek,	39.0	81	Apr-Sept.	56.9	55.3	48.2
nr. Joseph Lostine River,	119.0	90	A C+	212 0	שור ס	7.00.0
nr. Lostine	119.0	90	Apr-Sept.	141.8	145.8	132.3
Bear Creek,	67.0	89	Apr-Sept.	72 0	70.7	24 0
nr. Wallowa	01.0	0,7	Thrpeh	73.8	79.7	75.0
Catherine Creek,	66.0	90	Apr-Sept.	96.1	90.6	73.3
nr. Union	זפר ה	20		001 -	202.5	\ \
Grande Ronde River, at La Grande	175.0	90	Apr-Sept.	234.9	183.2	194.4

<sup>\*</sup>Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

<sup>\*\*</sup>Forecast by Boise Office, Soil Conservation Service. Corrected for storage.

1From U. S. B. R. records of inflow.

Observed flow / change in storage in Agency Valley Reservoir. bserved flow plus change in storage in Unity Reservoir. ncludes power plant tailrace.



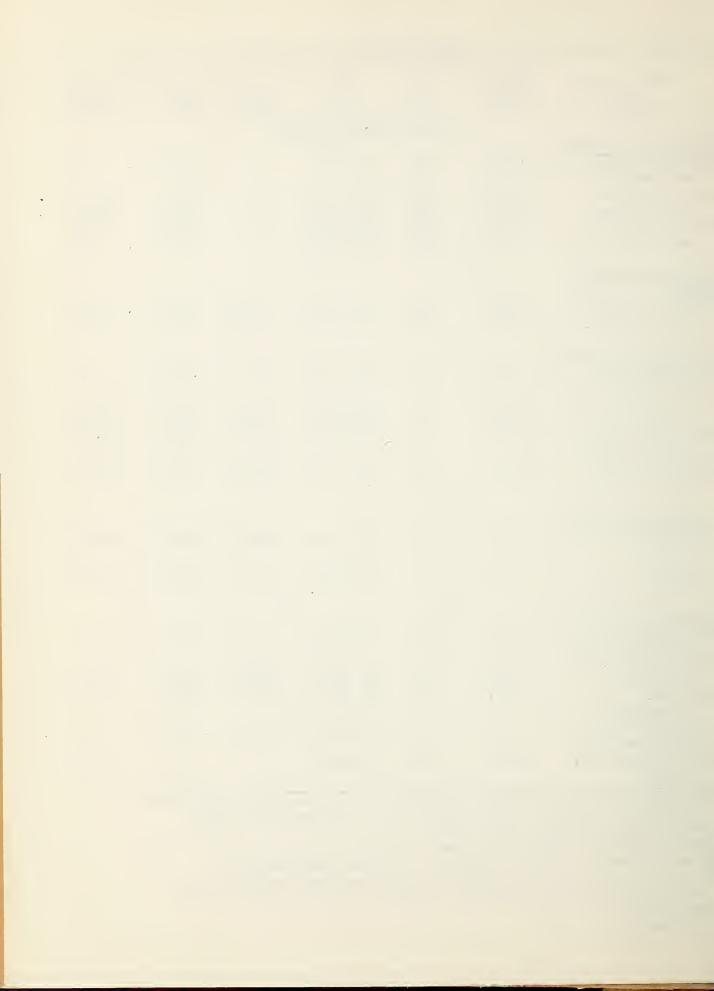
Streamflow Forecasts	- May 1, 1	955 (Cont	d.)			
	Se	asonal Sti	reamflow in	Thousands	of Acre I	reet
Basin, Stream	Forecast	%	Fore-		_	10 - Yr.
and	Runoff	10-Yr.	cast	Measured		Average
Station	1955	Ave.	Reriod	1953	1952	1943-52
		LOWER CO	DLUMBIA BASI	N		
Umatilla River Basin						
Umatilla River,	120.0	123	Apr-Sept.	С	103.0	97.8
nr. Gibbon						
Umatilla River,	230.0	121	Apr-Sept.	С	184.8	189.5
at Pendleton	225.0	122	Apr-July	С	180.5	184.8
McKay Creek	35.5	118	Apr-Sept.	С	23.3	30.1
nr. Pilot Rock	35.0	117	Apr-July	С	23.2	30.0
			1			
Walla Walla River						
Basin						
Walla Walla R., So.	82.5	106	Apr-Sept.	74.2	85.0	78.0
Fk.,nr. Milton	68.0	106	Apr-July	59-4	70.4	64.2
· ·						
John Day River Basin						
Strawberry Cr.	6.4	74	Apr-Sept.	11.1	10.5	8.7
nr. Prairie City						
John Day River	39.0	72	Apr-Sept.	61.5	67.2	54.0
at Prairie City <sup>5</sup>	36.0	75	Apr-July	54.9	58.0	48.2
John Day River,	103.0	<b>7</b> 7	Apr-Sept.	165.3	172.6	134.6
Mid.Fk. at Ritter						
John Day River,	210.0	77	Apr-Sept.	333.8	309.8	271.0
N.Fk., nr. Dale						
Crooked River Basin		40				
Crooked R.,	78.0	58	Apr-Sept.	173.6	205.8	133.9
nr. Post						, ,
Ochoco Res., net	11.5	33	Apr-Sept.	С	44.9	34.5
inflow <sup>6</sup>						
	•					
Deschutes River Basi	n az a	22		,		.= .
Crescent Creek	25.3	93	Apr-Sept.	40.9	47.2	27.2
at Crescent Lake						
Little Deschutes R.,	97.0	90	Apr-Sept.	138.3		107.7
nr. Lapine	91.0	97	Apr-July			94.1
Odell Cr.,	33 •3	100	Apr-Sept.	С	44.1	33.3
nr. Crescent	-0			_ •	0 -	2
Deschutes River,	78.0	109	Apr-Sept.	75.0	89.2	71.8
below Snow Creek	71.4.5					5d
Crane Prairie Res.	146.0	107	Apr-Sept.	С	С	136.7 <sup>d</sup>
inflow <sup>8</sup>						

<sup>\*</sup>Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time. 20bserved flow / Prairie Power Canal.

<sup>60</sup>bserved flow of Ochoco Cr. / Canal / changes in storage of Ochoco Res. 70bserved flow / changes in storage of Crescent Lake Reservoir.

<sup>&</sup>lt;sup>8</sup>From State Engineer's file #3220a, tabulating total inflow to Crane Prairie Reservoir a nd outflow, showing the loss in the Reservoir. Records not available.

<sup>1952</sup> excepted.



Streamflow Fo	orecasts - May 1,	1955 (Cont	'd.)			
	S	easonal St	reamflow in	Thousands	of Acre 1	Teet
Basin, St	tream Forecast	,%	Fore-			10 - Yr.
and	Runoff	10-Yr.	cast	Measured		Average
Static	on 1955	Ave.	Period	1953	1952	1943-52
Deschutes Riv	ver Basin					
(Continued)					-/-/ -	d(0,0
Deschutes Riv	ver 558.0	100	Apr-Sept.	661.2	765.7	560.8
at Benham F		101	Apr-July	433.2	533.5	377.6
Tumalo Creek,	47.0	85	Apr-Sept	С	81.0	55.4
nr. Bend <sup>10</sup>						
Squaw Creek	50,5	94	Apr-Sept.	57.8	58.8	53.7
nr. Sisters	3		• •			
White River,	190.0	107	Apr-Sept.	159.8	171.2	178.2
below Tygh	Valley 171.0	108	Apr-July	142.2	153.7	158.2
			1			
Hood River Ba	asin				*	
Hood River, W		104	Apr-Sept.	138.9	155.8	166.6
	145.0	100	Apr-July	118.0	135.9	144.8
	370.0	105				351.1
nr. Hood Ri	iver <sup>11</sup> 315.0	105	~ ~		-	299.1
					_,_,	_
Willamette Ri	iver Basin					
Row River,	120.0	111	Apr-Sept.	146.3	107.5	108.2
nr. Dorene	115.0	111	Apr-July	141.3	104.3	103.9
McKenzie R.,	709.0	115	Apr-Sept.	658.1	674.2	616.3
at McKenzie	e Bridge 550.0	116	Apr-July	491.1	512.2	472.2
McKenzie Rive	er, 1400.0	106	Apr-Sept.	1465.2	1434.3	1319.1
nr. Vida	1180.00	108	Apr-July	1188.3	1185.0	1087.6
South Santiam	1 660.0	106	Apr-Sept.	723.9	640.3	620.8
at Waterloo	630.0	107	Apr-July	686.5	610.3	587.9
North Santian	n 1050.0	112	Apr-Sept.	793.0	1016.4	939.0
at Mehama <sup>12</sup>	950.0	113	Apr-July	665.6	917.3	839.7
Willamette Ri		118	Apr-Sept.	6085.7	5607.6	5091.0
at Salem <sup>12</sup>		118		5361.3		4550.0
						181.6
						148.4
						203.7
				·		161.0
						665.3
	_					550.0
						860.0
nr. Cazader	,	129	-			745.2
nr. Dee Hood River, nr. Hood Ri  Willamette Ri Row River, nr. Dorene McKenzie R., at McKenzie Rive nr. Vida South Santiam at Waterloo North Santiam at Mehamal2 Willamette Ri at Salem 2 Clackamas Riv at Big Bott Oak Grove Fk. abv. Power Clackamas Riv abv. Three Clackamas Riv	145.0 370.0 370.0 370.0 370.0 315.0  Ever Basin  120.0 115.0 709.0 550.0 180.0 180.0 180.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0 1050.0	100 105 105 105 111 111 115 116 106 108 106 107 112 113 118 110 111 108 7.09 119 125 122	Apr-July Apr-Sept.	118.0 314.5 258.7 146.3 141.3 658.1 491.1 1465.2 1188.3 723.9 686.5 793.0 665.6	135.9 324.7 276.3 107.5 104.3 674.2 512.2 1434.3 1185.0 640.3 610.3	144 351 299 108 103 616 472 1319 1087 620 587 939 4550 181 148 203 161 665 550 860

\*Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

10 Observed flow / Columbia Southern Canal.

11 Observed flow plus P.P. & L. Co. power canal.

Observed flow / changes in storage in Crane Prairie, Wickiup and Crescent Lake Reservoirs.

<sup>120</sup>bserved flow / changes in s torage in any of the following reservoirs which are above the station: Lookout Point, Detroit, Fern Ridge, Cottage Grove and Dorena.

Records not available.



Streamflow Forecasts - May 1, 1955 (Contid.)

Streamflow Forecasts -	May 1, 19	bb (Conti	a.)			5 4
_			eamflow in	Thousands	of Acre i	ret
•	orecast	%	Fore-		D 0.0	10 - Yr.
	Runoff	10-Yr.	cast	Measuræd		Average
Station	1955	Ave.	Period	1953	1952	1943-52
		a AT TEOD N	T1 00 1 CM D1	GT NG		
	OREGON AND	CALIFORN	IIA COAST BA	727 1/2		
Umpqua River Basin						
No. Umpqua River,	156.0	87	Apr-Sept.	212.4	217.6	178.5
below Lake Creek	1)0.0	01	mpr bcp 0.	L-1-C C-1	22,00	21000
Clearwater River,	58.0	84	Apr-Sept.	81.3	86.7	69.0
above Trap Creek	J0.0	04	pr bop 0.	ر عد ت	55.1	
above frup of ear						
Rogue River Basin						
Hyatt Res., net	3.6	62	Apr-Sept.	9.6	9.0	5.8
Inflow <sup>13</sup>						
Fourmile Lake,	6.8	92	Apr-Sept.	2.3	10.0	7.4
net Inflow 14			• •			
Little Butte Cr.N.Fk.	13.5	82	Apr-Sept.	21.0	21.8	16.4
below Fish Lake <sup>15</sup>						
Rogue R. So. Fk,,	72.5	86	Apr-Sept.	С	120.3	84.0
nr. Prospect16	62.0	86	Apr-July	c	104.1	71.9
Rogue R. Mid. Fk.,	70.0	88	Apr-Sept.	С	96.1	79.5
nr. Prospect17	55.5	88	Apr-July	c	76.1	63.0
Rogue River,	317.0	92	Apr-Sept.	416.4	477.1	344.5
above Prospect	265.0	92	Apr-July	344.5	404.9	288.8
Rogue River,	665.0	91	Apr-Sept.	С	1007.9	733.7
below South Fork	545.0	91	Apr-July	С	831.2	597.4
Rogue River, at Raygold	895.0	92	Apr-Sept.	1276.2	1350.1	972.4
nr. Central Point	750.0	92	Apr-July	1069.7	1150.0	817.7
Rogue River,	855.0	91	Apr-Sept.	c	1311.7	939.2
at Grants Pass						
Applegate River,	86.0	71	Apr-Sept.	С	226.0	121.2
nr. Copper			•			
Illinois River,	181.0	99	Apr-Sept.	С	241.8	182.5
at Kerby			•			

<sup>\*</sup>Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

<sup>130</sup>bserved flow of Keene Creek at Hyatt Prairie / storage changes / 1600 a.f. for estimated evaporation during April-September period.

<sup>14</sup> Observed outflow into Cascade Canal / storage changes / 1600 a.f. for

estimated evaporation during April-September period.

15 Observed flow plus changes in storage in Fish Lake Reservoir / 90% of Cascade Canal inflow.

<sup>16</sup> Observed flow / South Fork Power Canal.

<sup>170</sup>bserved flow / Middle Fork Power Canal.

cRecords not available.



Seasonal Stream	Streamflow Forecasts	- May 1, 19	955 (Cont'	d.)			
Station   Runoff   10-Yr.   cast   Measured Runoff*   Average   1953   1952   1943-52					Thousands	of Acre	r'eet
Station   1955   Ave.   Period   1953   1952   1943-52			•		D# 1	D CC.	
Klamath River Basin   Sprague River,   190.0   72   Apr-Sept.   394.5   561.6   264.4							
Sprague River, nr. Chiloquin   190.0   72   Apr-Sept.   394.5   561.6   264.4   nr. Chiloquin   Williamson River,   340.0   80   Apr-Sept.   650.2   831.3   425.9   below Sprague R.   280.0   78   Apr-July   560.3   746.5   358.9   Upper Klamath Lake   445.0   80   Apr-Sept.   893.8   1151.2   556.5   net Inflow   343.0   76   Apr-July   738.2   1005.3   451.9   Clear Lake Res.,   32.0   61   Apr-Sept.   65.7   157.0   52.1   net Inflow   Gerber Res.,   15.0   61   Apr-Sept.   31.3   79.2   24.7   net Inflow   GREAT BASIN INTERIOR DRAINAGE   Goose Lake Basin   Drew Reservoir,   20.0   63   Apr-July   54.7   89.9   31.6   31.6   Apr-July   54.7   89.9   31.6   Apr-July   54.7   Apr-July   54.7   89.9   31.6   Apr-July   54.7   Apr-	Station	1955	Ave.	Period	1953	1952	1943-52
Sprague River, nr. Chiloquin   190.0   72   Apr-Sept.   394.5   561.6   264.4   nr. Chiloquin   Williamson River,   340.0   80   Apr-Sept.   650.2   831.3   425.9   below Sprague R.   280.0   78   Apr-July   560.3   746.5   358.9   Upper Klamath Lake   445.0   80   Apr-Sept.   893.8   1151.2   556.5   net Inflow   343.0   76   Apr-July   738.2   1005.3   451.9   Clear Lake Res.,   32.0   61   Apr-Sept.   65.7   157.0   52.1   net Inflow   Gerber Res.,   15.0   61   Apr-Sept.   31.3   79.2   24.7   net Inflow   GREAT BASIN INTERIOR DRAINAGE   Goose Lake Basin   Drew Reservoir,   20.0   63   Apr-July   54.7   89.9   31.6   31.6   Apr-July   54.7   89.9   31.6   Apr-July   54.7   Apr-July   54.7   89.9   31.6   Apr-July   54.7   Apr-	Vlemath Dirrom Bogin						
nr. Chiloquin Williamson River, 340.0 80 Apr-Sept. 650.2 831.3 425.9 below Sprague R. 280.0 78 Apr-July 560.3 746.5 358.9 Upper Klamath Lake 445.0 80 Apr-Sept. 893.8 1151.2 556.5 net Inflow18 343.0 76 Apr-July 738.2 1005.3 451.9 Clear Lake Res., 32.0 61 Apr-Sept. 65.7 157.0 52.1 net Inflow Gerber Res., 15.0 61 Apr-Sept. 31.3 79.2 24.7 net Inflow  CREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, 20.0 63 Apr-July 54.7 89.9 31.6d  Warner Lake Basin Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		100.0	70	Anr-Sent	391.5	561.6	264.4
Williamson River, 340.0 80 Apr-Sept. 650.2 831.3 425.9 below Sprague R. 280.0 78 Apr-July 560.3 746.5 358.9 Upper Klamath Lake 445.0 80 Apr-Sept. 893.8 1151.2 556.5 net Inflow 343.0 76 Apr-July 738.2 1005.3 451.9 Clear Lake Res., 32.0 61 Apr-Sept. 65.7 157.0 52.1 net Inflow Gerber Res., 15.0 61 Apr-Sept. 31.3 79.2 24.7 net Inflow  GREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel Deep Cr., 25.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		190.0	12	11p1 -bcp 0+	274•2	702.0	<u> </u>
below Sprague R. 280.0 78 Apr-July 560.3 746.5 358.9 Upper Klamath Lake 445.0 80 Apr-Sept. 893.8 1151.2 556.5 net Inflow 343.0 76 Apr-July 738.2 1005.3 451.9 Clear Lake Res., 32.0 61 Apr-Sept. 65.7 157.0 52.1 net Inflow Gerber Res., 15.0 61 Apr-Sept. 31.3 79.2 24.7 net Inflow  GREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4	-	31,0.0	80	Apr-Sept.	650.2	831.3	425.9
Upper Klamath Lake 445.0 80 Apr-Sept. 893.8 1151.2 556.5 net Inflow 343.0 76 Apr-July 738.2 1005.3 451.9 Clear Lake Res., 32.0 61 Apr-Sept. 65.7 157.0 52.1 net Inflow Gerber Res., 15.0 61 Apr-Sept. 31.3 79.2 24.7 net Inflow  GREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. nr. Adel Deep Cr., above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4							
net Inflow18       343.0       76       Apr-July       738.2       1005.3       451.9         Clear Lake Res., net Inflow       32.0       61       Apr-Sept.       65.7       157.0       52.1         net Inflow       15.0       61       Apr-Sept.       31.3       79.2       24.7         Geose Lake Basin         Drew Reservoir, net Inflow       20.0       63       Apr-July       54.7       89.9       31.6d         Warner Lake Basin         Twentymile Cr. nr. Adel       15.8       73       Apr-June       20.0       77.1       21.7         nr. Adel       Deep Cr., shove Adel       57.5       80       Apr-June       82.0       129.2       71.7         above Adel       Honey Cr.,       12.8       78       Apr-June       17.0       29.9       16.4							
Clear Lake Res., 32.0 61 Apr-Sept. 65.7 157.0 52.1 net Inflow  Gerber Res., 15.0 61 Apr-Sept. 31.3 79.2 24.7 net Inflow  GREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. nr. Adel Deep Cr., above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4	net Inflow18						
net Inflow       15.0       61 Apr-Sept.       31.3       79.2       24.7         net Inflow       GREAT BASIN INTERIOR DRAINAGE         Goose Lake Basin         Drew Reservoir,       20.0       63 Apr-July       54.7       89.9       31.6d         Warner Lake Basin         Twentymile Cr.       15.8       73 Apr-June       20.0       77.1       21.7         nr. Adel       Deep Cr.,       57.5       80 Apr-June       82.0       129.2       71.7         above Adel       Honey Cr.,       12.8       78 Apr-June       17.0       29.9       16.14				_			
Gerber Res., net Inflow  GREAT BASIN INTERIOR DRAINAGE  Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. nr. Adel Deep Cr., above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4	•	) <b></b> •	01	ispi soper		-2111	
Goose Lake Basin   20.0   63   Apr-July   54.7   89.9   31.6d		15.0	61	Apr-Sept.	31.3	79.2	24.7
Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. nr. Adel Deep Cr., above Adel Honey Cr., 12.8  78  Apr-June Apr-June Apr-June 17.0  Parity 54.7  89.9  31.6  Apr-June 20.0  77.1  21.7  21.7  Apr-June 82.0  129.2  71.7  12.8  78  Apr-June 17.0  29.9  16.4	•			P- N-P-			
Goose Lake Basin Drew Reservoir, net Inflow  Warner Lake Basin Twentymile Cr. nr. Adel Deep Cr., above Adel Honey Cr., 12.8  78  Apr-June Apr-June 17.0  89.9  31.6  31.6  Apr-June 20.0  77.1  21.7  Apr-June 82.0  129.2  71.7  21.7							
Drew Reservoir, net Inflow       20.0       63       Apr-July       54.7       89.9       31.6d         Warner Lake Basin Twentymile Cr. nr. Adel       15.8       73       Apr-June       20.0       77.1       21.7         nr. Adel       Deep Cr., above Adel       57.5       80       Apr-June       82.0       129.2       71.7         Honey Cr.,       12.8       78       Apr-June       17.0       29.9       16.4		GREAT F	BASIN INTI	ERIOR DRAIN	1GE		
Drew Reservoir, net Inflow       20.0       63       Apr-July       54.7       89.9       31.6d         Warner Lake Basin Twentymile Cr. nr. Adel       15.8       73       Apr-June       20.0       77.1       21.7         nr. Adel       Deep Cr., above Adel       57.5       80       Apr-June       82.0       129.2       71.7         Honey Cr.,       12.8       78       Apr-June       17.0       29.9       16.4							
met Inflow         Warner Lake Basin         Twentymile Cr.       15.8       73       Apr-June       20.0       77.1       21.7         nr. Adel       Deep Cr.,       57.5       80       Apr-June       82.0       129.2       71.7         above Adel       Honey Cr.,       12.8       78       Apr-June       17.0       29.9       16.4					۔ ، ۔	0.0	b) 50
Warner Lake Basin Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		20.0	63	Apr-July	54.7	89.9	31.6
Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel  Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel  Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4	net Inflow						
Twentymile Cr. 15.8 73 Apr-June 20.0 77.1 21.7 nr. Adel  Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel  Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4	Wannon Lako Basin						
nr. Adel Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		1 E 8	72	Anr.June	20-0	77.1	21.7
Deep Cr., 57.5 80 Apr-June 82.0 129.2 71.7 above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		15.0	12	11p1 - 0 airc	20.0	1101	2201
above Adel Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		57 <b>5</b>	80	Apr-June	82.0	129-2	71.7
Honey Cr., 12.8 78 Apr-June 17.0 29.9 16.4		21.0	00	p2		,	
		12.8	78	Apr-June	17.0	29.9	16.4
			, -				
Chewaucan River							
Basin					0		-( 0
Chewaucan River, 52.0 68 Apr-June 103.8 150.3 76.8	-	52.0	68	Apr-June	103.8	150.3	76.8
nr. Paisley	nr. Paisley						
	25.71						
Malheur and Harney							
Lakes Basin				A	77 0	מו. ד	0.4
Trout Cr., 7.0 73 Apr-Sept. 11.2 24.5 9.6 nr. Denio		7.0	73	Apr-Sept.	11.6	24.5	9.0
D		1.0.0	72	Anr-Sent	72 1	123 1.	67.3
Donner und Blitzen 49.0 73 Apr-Sept. 72.1 123.4 67.3 R.,nr,Frenchglen		47 00	13	Thi -pehr.	14.1	147.4	01.0
Silvies River, 35.0 32 Apr-Sept. 138.1 235.8 110.7		35 O	30	Apr-Sept.	138.1	235.8	110.7
nr. Burns		J)•0	)2		-,,,,,	-	2201

<sup>\*</sup>Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

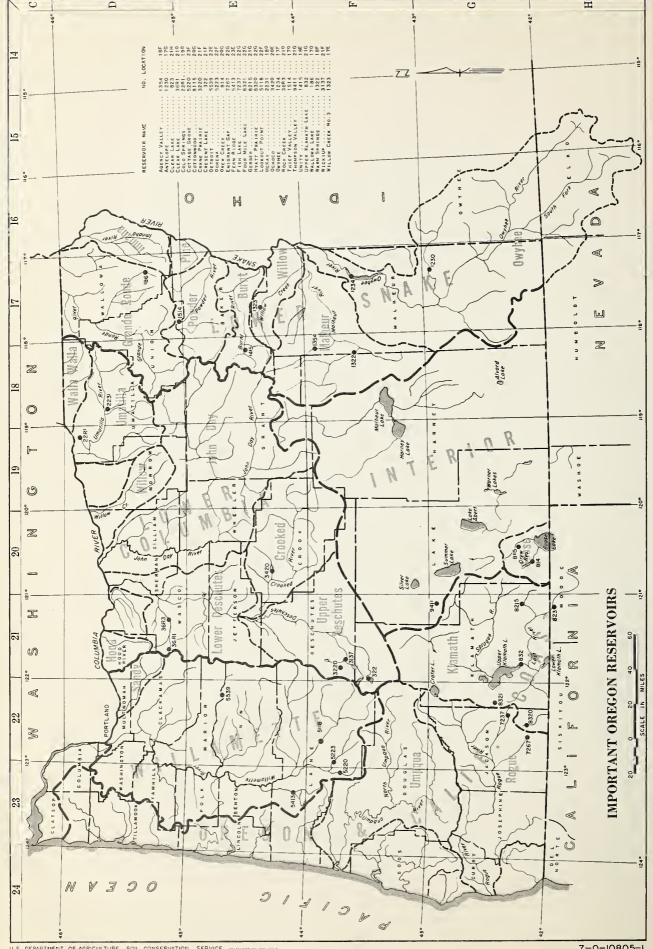
18 From COPCO records of inflow.

CRecords not available.

d<sub>1943</sub> and 1945 excepted.







BASIN		USABLE	THOUSA		ET IN STO FIRST	RAGE ABOUT
and STREAM	RESERVOIR	CAPACITY (M.A.F.)	1955	1954	1953	10-Yr.Avg. 1943-52
		ER COLUMBI wer Snake	A DRAINAG	E		
Owyhee	Antelope Owyhee	36.5 715.0	17.5 323.7	31.3 503.0	29 <b>.</b> 2 553 <b>.</b> 9	31.4 <sup>g</sup> 650.6
Malheur	Warm Springs Agency Valley	191.0 60.0	46.4 33.3	147.2 46.7	194•9 60.0	134.0 55.1
Burnt	Unity	25.2	13.2	25.2	25.2	21.5
Grande Ronde	e Wallowa Lake	40.9	19.1	33.3	29.8	21.1
	TOM	ER COLUMBI	A DRAINAG	E		
Umatilla	McKay Cold Springs	74.0 50.0	40.6 49.2	53.5 50.0	71.1 48.6	66.4 48.5
Deschutes	Ochoco Crescent Lake Crane Prairie Wickiup	46.0 54.9 55.3 187.3	26.0 21.3 38.6 198.4	46.5 37.1 59.2 198.7	47.2 50.0 51.0 196.0	38.2 46.8 45.4 111.4
Willamette	Cottage Grove Dorena Fern Ridge Detroit Lookout Point	30.1 <sup>a</sup> 70.5 <sup>a</sup> 94.2 <sup>a</sup> 340.0 <sup>a</sup> 350.0 <sup>a</sup>	24.4 54.3 94.2 102.5 186.0	22.9 50.4 88.8 308.6	28.8 53.9 87.1 68.2	24.2  77.3 
	OREGON AN	D CALIFORN	IA COAST	DRAINAGE		
Rogue	Fish Lake Fourmile Lake <sup>b</sup> Emigrant Gap Hyatt Prairie <sup>b</sup>	7.8 16.1 8.3 16.1	5.6 10.4 5.3 11.6	7.7 16.1 8.3 16.1	7.1 15.5 8.3 16.1	5.7 9.5 8.2 9.2
Klamath	Upper Klamath Lk. Gerber Clear Lake	584.0 <sup>c</sup> 94.0 440.2	533.2 46.5 251.8	540.3 80.3 325.2	534.0 81.4 290.2	483 <b>.</b> 6 59 <b>.3</b> 244 <b>.</b> 5
		INTERIOR D	RAINAGE			
Goose Lake	Cottonwood Drew	4.1 62.5	2.8 39.8	4.5 62.9	4.7 64.8	3.8 <sup>h</sup> 56.1

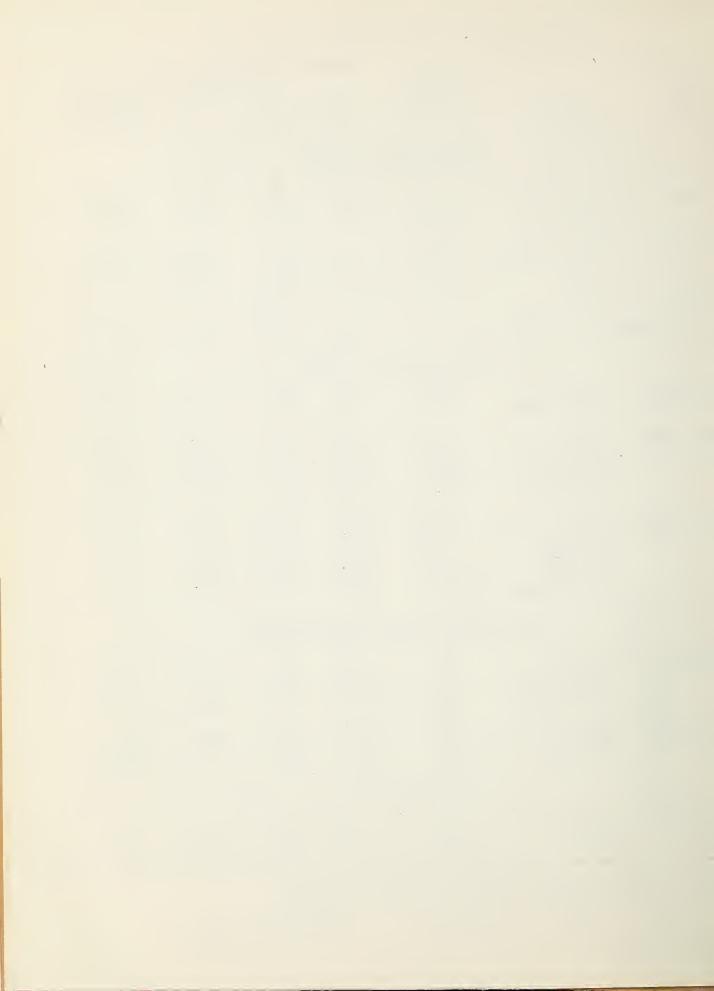
aStorage space reserved for flood control.

bBy ditch to Rogue River side from Klamath Drainage

 $<sup>^{\</sup>mbox{c}}\mbox{Based}$  on gage zero elevation of 4135.0. d1948-50 excepted.

e1943-51 f1944-51

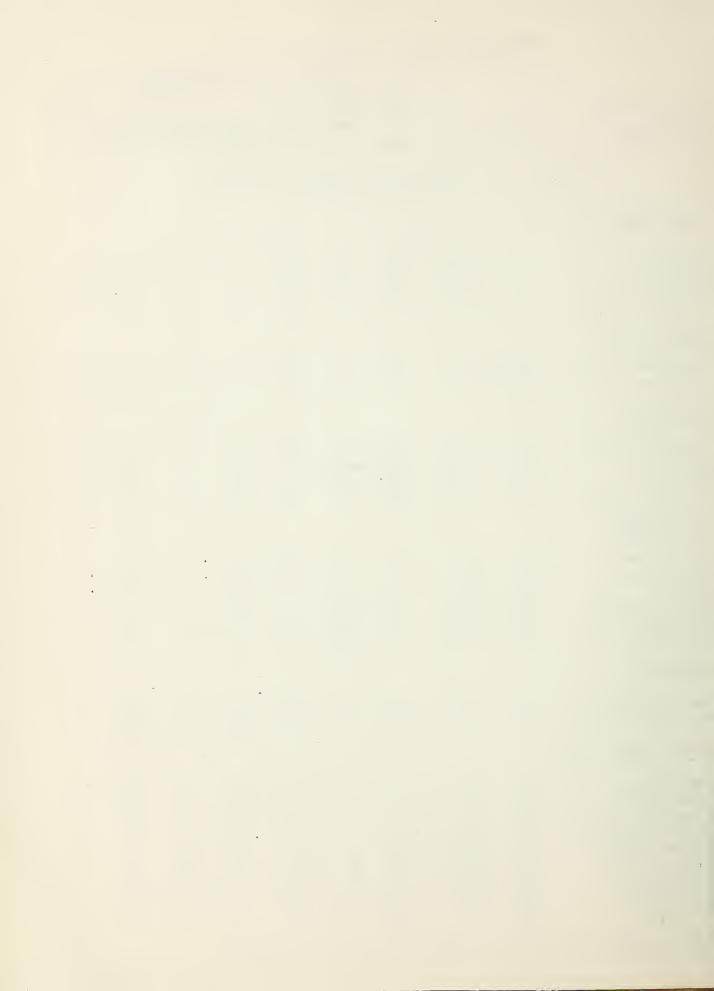
g1948-49-50 excepted. h1943-44-45 excepted.



	OREGON 3	MOM SUN	VE12 -	ADOUT 1	TAI I, I	722			
				SNO	OW COVER	MEASUI	REMENTS		
				1955		]	Past Rec	ord	
DRAINAGE BASIN and	No.		Date	Snow	Water	T-70 + 0 = 0	Cantant	(Tm )	Years of
SNOW COURSE	or State	Elev.	of Survey		Content (In.)	1954	1953		Record
	PPER	COL	U M B	I A I	DRAI				
OWYHEE RIVER									
Bear Creek Fox Creek Silver City South Mtn. No. 2	15H1 15H2 16F3 16G1	7800 6800 6400 6340	5/1 5/1 5/4 4/29	57 13 40 41	21.8 4.9 17.1 <sup>a</sup> 14.4	No pre	evious r  6.6 T	1.0 5.4 T	6 8 1
MALHEUR RIVER									
Blue Mtn. Springs Lake Creek	18E16 18E18	5900 5120	5/1 4/28	36 19	13.8 8.4	0.7		3.5 0.0	5 2
BURNT RIVER									
Dooley Mountain *Gold Center Tipton Blue Mtn. Summit	17E1 18E8 18E9 18E13	5430 5340 5100 5098	4/30 Not Si 4/30 4/29	21 ur <b>v</b> eyed 21 23	7.8 8.9 8.1	0.0 0.0 0.0	  0 •8	0.0 0.0 0.0 0.4	1 1 2 5
POWDER RIVER									
Anthony Lake Goodrich Lake Bourne Dooley Mountain Eilertson Meadows *Gold Center	18E1 18E6 18E5 17E1 18E3 18E8	7125 6775 5800 5430 5400 5340	4/30 4/29	81 87 urveyed 21 30 urveyed	7.8 11.3	27.0  2.4 0.0  0.0		27.0 38.2 2.4 0.0 0.0	1 1 1 1 1
IMNAHA RIVER									
*Aneroid Lake No.1 *Aneroid Lake No. 2	17D1 1 <b>7</b> D2	7480 7000	5/7 5/7	89 <b>7</b> 0	37.0 <sup>a</sup> 29.5 <sup>a</sup>	41.1 29.2		36.1 30.6	8 5
GRANDE RONDE RIVER									
Aneroid Lake No. 1 Anthony Lake Aneroid Lake No. 2 Moss Spring Beaver Reservoir Tollgate County Line Schoolmarm Meacham	17D1 18E1 17D2 17D6 18D9 18D3 18D8 18D7 18D5	7480 7125 7000 5850 5340 5070 4800 4775 4300	5/7 5/2 5/7 5/2 4/28 4/29 5/2 4/29	89 81 70 71 36 79 20 13	37.0 <sup>a</sup> 31.6 29.5 <sup>a</sup> 30.1 13.5 35.2 8.4 6.0 18.1		  8.9 16.6 evious r		

<sup>\*</sup>Not located directly on this drainage area.

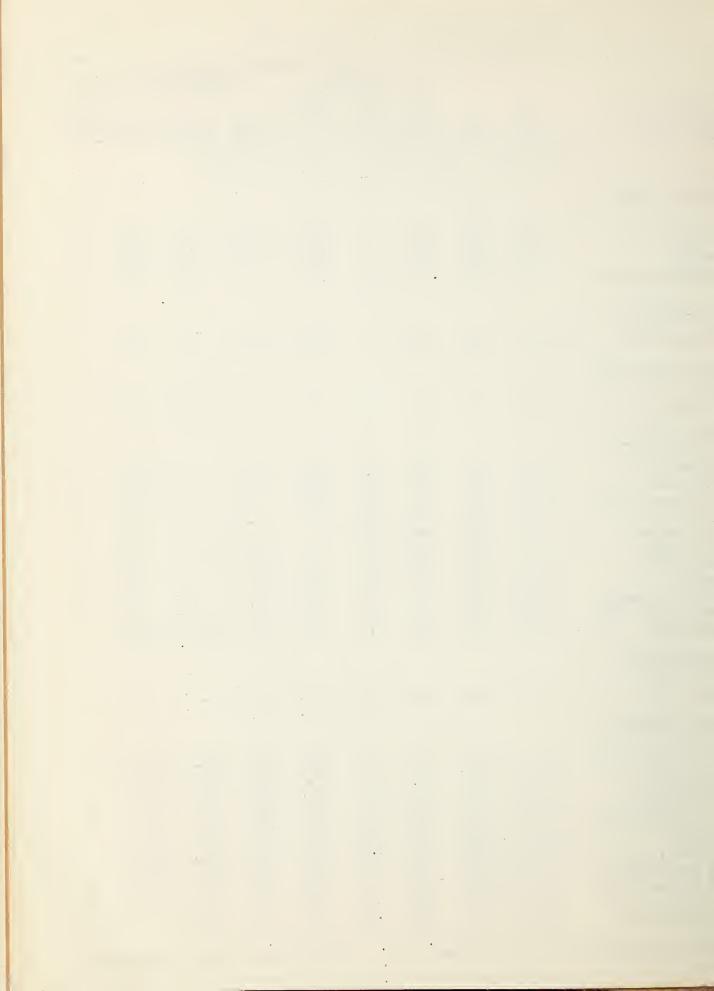
<sup>&</sup>lt;sup>a</sup>Telegraphic.



	Olthool E	211011 0011	V 22.0			.,,,,			
					OW COVER				
DDATMACH DACTM	73.7		D	1955	X 7 - 1		Past Rec	ord	37 - 5
DRAINAGE BASIN and	No. or		Date of	Snow	Water	Water	Content	(Tn.)	Years of
SNOW COURSE	State	Elev.	Survey		(In.)	1954	1953		Record
	T 0 11 F	D 0 0	T 17 34	D T 1	D D A	T 37 A	7 B		
	T O M E	<u>R</u> <u>C</u> <u>O</u>	T n w	$\frac{B}{B} + \frac{A}{B}$	DRA	<u> </u>	<u> </u>		
UMATILLA RIVER									
Arbuckle Mtn.	19D2	5400	4/28	41	15.7	0.5		4.3	3
Tollgate	18D3	5070	4/29	79	35.2	8.7	16.6	16.4	5
Meacham Emigrant Springs	18D5 18D4	4300 3925	4/29 4/29	42 32	18.1 12.7	0.0	0.0	0.5 0.1	3555
WILLOW CREEK		27-2	٦, ->		,				
Arbuckle Mtn.	19D2	5400	4/28	41	15.7	0.5		4.3	3
WALLA WALLA RIVER	1/02	<i>)</i> 400	4/20	11-	±2•1	0.5		4.0	J
	2000	<b>4050</b>	1 /00	=-	^	0 =	-//	- ( )	
Tollgate	18D3	5070	4/29	79	35.2	8.7	16.6	16.4	5
JOHN DAY RIVER									
Anthony Lake	18E1	7125	5/2	81	31.6	27.0		27.0	ı
Olive Lake	18E7	6000	4/26	61	22.8			23.4	2
Blue Mtn. Springs Arbuckle Mtn.	18E16 19D2	5900 5400	5/1 4/28	36 41	13.8 15.7	0.7 0.5	0x0	3.5 4.3	5
Gold Center	18E8	5340	Not S	urveyed		0.0		0.0	253144253
*Izee Summit	19E9	5293	4/29	23	7.2	0.0		0.8	4
Starr Ridge Tipton	19 <b>E</b> 7 18E9	5156 5100	4/29 4/30	15 21	4.3 8.9	0.0		0.0	4
Blue Mtn. Summit	18E13	5098	4/29	23	8.1	0.0	0.8	0.4	5
Beach Creek Summit	19E2	4800	4/28	16	4.9	0.0		0.1	3
Schoolmarm	18D7	4775	5/2	13	6.0	No pre	evious r	ecord.	
CROOKED RIVER									
Marks Creek	20E1	4540	4/30	1.6	0.5			0.0	1
DESCHUTES RIVER									
New Dutchman Flat	21F2	6400	5/1	128	53.7	60.3	66.6	63.8	10
Paulina Lake	21F13	6330	4/30	46	18.6		evious r	ecord.	
Windigo Pass Three Creeks Mdws.	22F15 21E13	5800 5600	4/27 4/29	125 59	48.8 21.0	46.1	53.1 17.9	53.0	6
Willamette Pass	22F14	5600	4/26	131	50.2	48.4	51.4	17.0 50.7	6
Tangent	21F3	5400	5/1	44	16.6	7.8	13.6	12.3	3
Fire Road Cascade Summit	21F14 22F3	5050 4880	5/1 4/28	9.7 109	4.6 42.3		evious r		0
New Crescent Lake	21F10	4800	4/26	36	15.3	25.7	30.2 8.2	31.7	9
*Chemult	21F11	4760	5/1	3	1.0b	0.0	0.4	0.4	3 8 5
Crescent Lake	21F9	4760	4/26	23	9.2	0.0	0.0	2.6	5

<sup>\*</sup>Not located directly on this drainage area. 

<sup>a</sup>Telegraphic. <sup>b</sup>Partly estimated.



				SMC	OW COVER	MEASUE	REMENTS		
				1955	ov oov hit		Past Rec	ord	
DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	Snow Depth	Water Content (In.)				Years of Record
DESCHUTES RIVER (Cont	'd.)								
Hogg Pass Black Pine Spg. Hungry Flat Paulina Prairie Clear Lake	21 E6 21 E11 21 F4 21 F15 21 D12	4755 4600 4400 4285 3500	4/30 4/29 5/2 5/1 5/6	140 14 0 0.0 44	62.5 5.0 0.0 0.0 17.9 <sup>a</sup>	43.4 0.0 0.0 No pre	48.7 0.0 0.0 evious r	54.4 0.0 0.0 ecord. 12.4	8 3 3
WILLAMETTE VALLEY STR	EAMS								
SANDY RIVER <sup>1</sup> Phlox Point Still Creek Clear Lake	21D8 21D9 21D12	5600 3700 3500	5/6 5/6 5/6	183 84 44	89.2 <sup>a</sup> 39.8 <sup>a</sup> 17.9 <sup>a</sup>	70.8 21.2 7.8	72.3 14.3	62.0 15.8 12.4	16 15 4
CLACKAMAS RIVER Clear Lake Peavine Ridge Big Bottom Lake Harriet	21D12 21D14 21D15 21D16	3500 3500 2118 2045	5/6 4/30 5/1 4/30	կկ 7կ 18 0	17.9 <sup>a</sup> 31.4 7.7 0.0	7.8 17.8 0.0	17.2	12.4 17.8 0.0 0.0	10 3 3
SANTIAM RIVERS Hogg Pass Santiam Junction Marion Forks Whitewater Bridge Detroit (new town) Detroit Dam Mill City Snow Line: Approximate	21E6 21E5 21E4 21E3 22E1 22E2 22E3 ely 220	4755 3990 2730 2175 1500/ 1580 826	4/30 4/30 4/30 4/30 4/30 4/30 4/30	140 85 43 T 0 0	62.5 38.4 18.0 T 0.0 0.0	43.4 8.4 0.0 0.0 0.0 0.0	48.7 16.3 0.0 0.0 0.0 0.0	54.4 17.2 3.3 0.0 0.0 0.0	8 7 6 4 4 4 4
McKENZIE RIVER McKenzie Hogg Pass Santiam Junction Dead Horse Grade White Branch Slide Lost Creek Ranch McKenzie Bridge Vida Snow Line: Approximate	21E7 21E6 21E5 21E8 21E9 22E4 22E5 22E6 ely 260	4800 4755 3990 3800 2800 1956 1372 800	4/30 4/30 4/30 4/30 4/30 4/30 4/30	144 140 85 86 37 0	62.9 62.5 38.4 37.8 16.8 0.0 0.0	No pre No pre No pre No pre	48.7 16.3 evious revious revio	54.4 17.2 ecord. ecord. ecord.	8 7

<sup>\*</sup>Not located directly on this drainage area. Telegraphic.

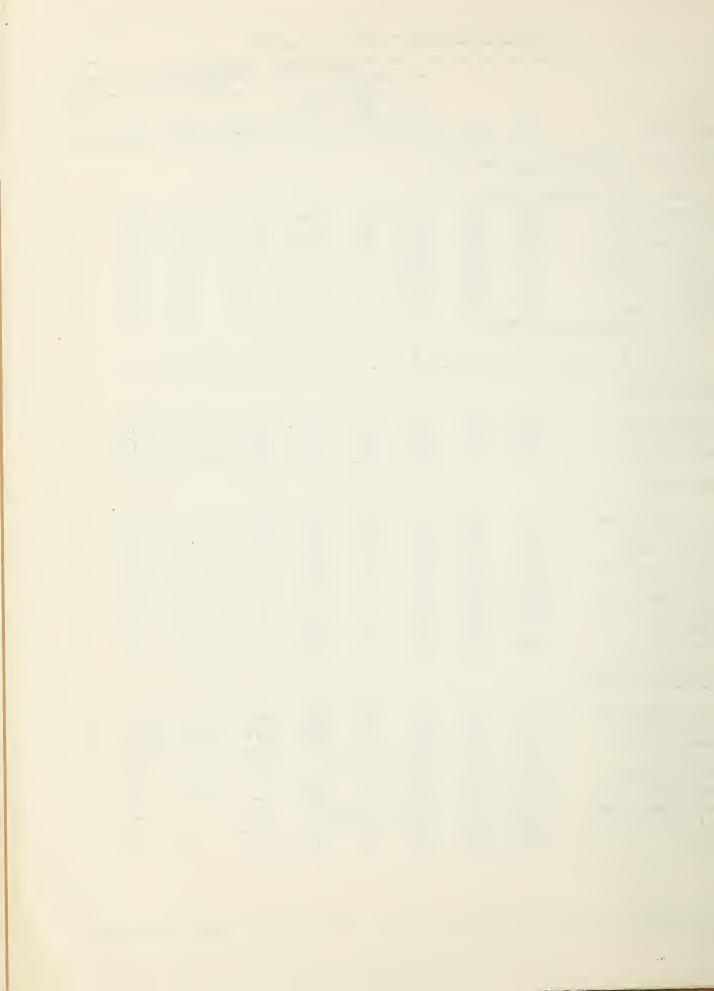
Not strictly a part of the Willamette Drainage; these surveys are indicative of west slope conditions.



				SNO	OW COVER	MEASU	REMENTS		
				1955	00120		Past Reco	ord	
DRAINAGE BASIN	No.		Date	Snow	Water				Years
and	or		of		Content				
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1954	1953	Avg.	Record
WILLAMETTE VALLEY STR									
Willamette Pass Cascade Summit Salt Creek Falls Railroad Overpass McCredie Spring Oakridge Meridian Dam Snow Line: Approximat	22F14 22F3 22F4 22F5 22F6 22F7 22F8	5600 4880 4000 2750 2120 1310 750	4/26 4/28 4/28 4/28 4/28 4/28 4/28	131 109 85 3.2 0 0	50.2 42.3 31.8 1.0 0.0 0.0	48.4 25.7 10.0 0.0 0.0 0.0	51.4 30.2 14.6 0.0 0.0 0.0	50.7 31.7 15.5 0.0 0.0 0.0	6 95 45 4
OREGONAND UMPQUA RIVER	<u>C</u> <u>A</u> <u>L</u> .	<u>I F O R</u>	<u>N I A</u>	<u>C</u> <u>O</u> <u>A</u>	<u>s</u> <u>T</u> <u>D</u> <u>I</u>	RAII	NAGE		
Windigo Pass Diamond Lake North Umpqua	22F15 22F18 22F16	5800 5315 4215	4/27 4/28 5/4	125 60 38	48.8 23.4 14.6	46.1 14.3 No pre	53.1 24.0 evious re	53.0 16.3 ecord.	6 16
ROGUE RIVER									
*Park Headquarters *Annie Spring *Fourmile Lake Billie Creek Div. Hobart Lake *Hyatt Prairie Res. Fish Lake Silver Burn South Fork Canal	22G5 22G6 22G12 22G13 22G17 22G16 22G14 22G2 22G9	6450 6018 6000 5300 5010 4900 4865 3720 3500	5/1 5/1 4/29 4/29 5/1 5/1 4/28 5/3 5/3	139 115 76 71 T T 40 20	58.2 48.0 28.4 23.3 T T 13.6 8.3 0.0	60.8 43.0 11.2  No pre 0.0 0.0 0.0	71.5 51.8 25.6 17.2 evious re 2.0 1.3 0.0	62.9 43.4 18.4 17.9 ecord. 2.2 3.9 2.6 0.0	11 14 2 5 4 4 3 2
KLAMATH LAKE BASIN									
Park Headquarters Annie Spring Fourmile Lake Strawberry *Quartz Mountain Billie Creek Div. Lake of the Woods Hyatt Prairie Res. Chemult	2205 22G6 22G12 20G9 20G6 22G13 22G15 22G16 21F11	6450 6018 6000 5600 5320 5300 4960 4900 4760	5/5 4/29	139 115 76 rveyed 0 71 t delay T	0.0 23.3	60.8 43.0 11.2 0.0 0.0  3.9	71.5 51.8 25.6  0.0 17.2  0.4	62.9 43.4 18.4 0.0 0.0 17.9 5.7 2.2 0.4	11 14 2 1 4 5 8 4

<sup>\*</sup>Not located directly on this drainage area. 

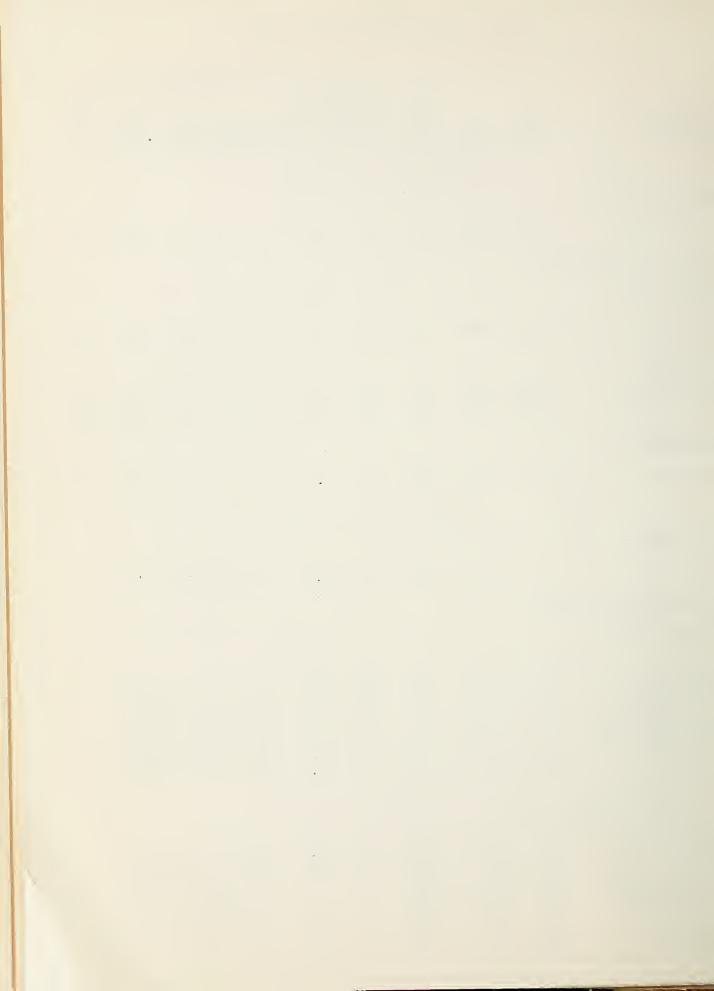
<sup>a</sup>Telegraphic <sup>b</sup>Partly estimated.



				SNOW	COVER		REMENTS		
				1955		F	Past Reco	ord	
DRAINAGE BASIN	No.		Date		later			\	Years
and	or		of				Content		of
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1954	1953	Avg. I	Record
	<u>I</u> :	N T E R	I O R	DRAI	N A G	E			
GOOSE LAKE BASIN									
Strawberry	20G9	5600	Not Si	rveyed.		0.0		0.0	1
Quartz Mountain	20G6	5320	5/5	o	0.0	0.0	0.0	0.0	4
CHEWAUCAN RIVER						,			
»Quartz Mountain	20G6	5320	5/5	0	0.0	0.0	0.0	0.0	4
HARNEY BASIN									
Izee Summit	19E9	5293	4/29	23	7.2	0.0		0.8	4
Idlewild Camp	18F3	5200	4/28	8	2.2			0.0	2
Starr Ridge	19E7	5156	4/29	15	4.3	0.0		0.0	4
Lake Creek	18E18	5120	4/28	19	8.4			0.0	2



				1955	OW COVER		Past Rec	ord	
DRAINAGE BASIN	No.		Date	Snow					Years
and SNOW COURSE	or State	Elev.	of Survey		Content (In.)	Water 1954	Content 1953		of Record
DION COCIO						±174	+///	****	10001
		<u>A</u> P	RIL	1, 1	255				
POWDER RIVER									
Summit Springs	18D10	6000	4/8	54	19.1	16.6	18.6	21.1	18
WILLAMETTE VALLEY ST	REAMS								
MARY'S RIVER									
Mary's Peak	23EL	3620	4/9	58	22.2	8.3	13.3	11.5	14
ROGUL RIVER									
Seven Lakes #1 Seven Lakes #2	22Gl0 22Gll	6800 6200	4/7 4/7	118 97	53.0 40.9	65.9 45.1	70.2 48.2	58.1 42.9	18 18
HARNEY BASIN									
Fish Creek	18G2	7900	3/22	59	18.7	22.4	22.1	25.6	15
		AP B	RIL	15,	1955				
POWDER RIVER									
Taylor Green	17D7	5740	4/11	41	14.4	12.8	20.5	16.8	17
WILLAMETTE VALLEY ST	REAMS								
SANTIAM RIVERS									
Hogg Pass Santiam Junction Marion Forks Whitewater Bridge Detroit (new town) Detroit Dam Mill City Snow Line: Approxima	21E6 21E5 21E4 21E3 22E1 22E2 22E3 tely 200	4755 3990 2730 2175 15004 1580 826	4/15 4/15 4/15 4/15 4/15 4/15 4/15	135 82 47 6.2 0 0	55.6 35.4 19.6 2.2 0.0 0.0	No pre	evious revious	ecord. ecord. ecord. ecord.	1
MIDDLE FORK WILLAM	ETTE RIV	ER							
Cascade Summit Champion Salt Creek Falls Railroad Overpass McCredie Spring Oakridge Meridian Dam	22F3 22F9 22F4 22F5 22F6 22F7 22F8	4880 4500 4000 2750 2120 1310 750	4/15 4/14 4/15 4/15 4/15 4/15	93 104 71 T 0 0	36.2 42.4 26.0 T 0.0 0.0	No pre	evious re evious re evious re evious re	ecord. ecord. ecord.	1



•					SNO	OW COVER	MEASU	RIMENTS		
					1955		Past Record			
	DRAINAGE BASIN	No.		Date	Snow	Water				Years
•	and	or		of	Depth	Content	Water	Conten	t (In.)	of
	SNOW COURSE	State	Elev.	Survey		(In.)	1954	1953		Record
			,							
WILLAMET TE VALLEY STREAMS (Contid.)										
	COAST FORK WILLAMETTE RIVER (Row River)									
			·	,						
	Champion	22F9	4500	4/14	104	42.4	No pr	evious	record.	•
	Golden Curry Creek	22F10	3136	4/14	18	5.3	No pr	evious	record.	
	Weaver Creek	22F11	2440	4/14	T	T	No pr	evious :	record.	
	Lund Park	22F12	1740	4/14	0	0.0		evious		
	Layng Creek R. S.	22F13	1200	4/14	0	0.0	No pr	evious	record.	
	now Line: Approximately 2400'									
	KLAMATH LAKE BASIN									
the state of the state of	Lake of the Woods	22G15	4960	4/15	25	10.7		12.8	16.1	2



# CURRENT OREGON STREAMFLOWa

	Streamflow in Thousands of acre-feet					
	Oct. 1951	- Mar. 1955	Apr.	1955		
BASIN, RIVER and STATION	Total	As percent		As percent		
		of 1938-52		of 1938-52		
		average		average		
UPPER COLUMBIA DRAINAGE (Lower						
Snake in Oregon)						
	0.0		٠ ٣	1.0		
Owyhee Res. net inflow	88.0	31	120.5	48		
LOWER COLUMBIA DRAINAGE						
Walla Walla, So. Fk. nr. Milton			13.6	76		
Umatilla R. nr. Umatilla	58.5	27	46.7	66		
John Day R. at Service Cr.	160.0	27	178.4	49		
Deschutes R. at Moody	1840.0	86	333.2	73		
Hood R. and conduit nr. Hood R.	323.5	70	73.8	86		
Willamette R. at Salem	8107.0	65	2707.0	161		
Willamette R. at Albany	4503.0	60	1708.0	169		
M.F. Willamette R. below North Fk.	685.0	54	264.2	109		
MOT. CIL FK.						
OREGON AND CALIFORNIA COAST DRAINAGE	1					
Umpqua R. nr. Elkton	2306.0	55	Report d	lelayed.		
Rogue R. at Raygold	694.0	53	197.5	77		
Upper Klamath Lake net inflow	732.0	105	136.3	79		

<sup>&</sup>lt;sup>a</sup>Preliminary data supplied by: U. S. Geological Survey, Current Records Center, Portland, Oregon; The <sup>C</sup>alifornia Oregon Power Co., <sup>M</sup>edford, Oregon; and North and South Boards of Control, Owyhee <sup>P</sup>roject, Nyssa, Oregon; office of State Engineer, Salem, Oregon.



# OREGON PRECIPITATIONa

		FALL tOct	WINTER DecJanFeb		SPRING			
DRAINAGE DIVISIONS	Nov	1954 Departureb	Mar.	1954-155 Departuræb	April Observed	1955 Departureb		
Southeastern	0.96	- 1.72	2.94	- 1.93	1.90	<i>≠</i> 1.11		
Blue Mountains	2.38	- 2.81	6.11	- 2.86	2.04	√ 0.56		
Wallowa Mountains	3.01	- 2.75	6.51	- 2.02	2.28	√ 0.44		
Lower Columbia	3.14	- 2.21	4.56	- 3.93	1.93	<b>≠</b> 0.75		
Upper Deschutes	1.12	- 2.79	2.16	- 4.23	1.12	≠ 0.25		
Willamette Valley	10.91	- 6.72	22.46	- 6.76	7.19	<i>≠</i> 3.62		
Southwestern	3.16	- 4.68	8.47	- 5.41	2.11	≠ 0.65		
South-Central	1.49	- 2.18	3.15	- 3.08	1.68	<b>≠</b> 0.90		
Southeastern	- Owyhe	ee and lower	Malheur o	drainages.				
Blue Mountains	- Upper valleys of the Umatilla, John Day and Malheur, and the Powder, Burnt and Silvies drainages.							
Wallowa Mountains	- Imnaha, Wallowa and Catherine drainages.							
Lower Columbia	- Lower valleys of the Walla Walla, Umatilla, John Day and Deschutes, and the Hood and Sandy drainages.							
Upper Deschutes	- Upper Deschutes and Crooked drainages.							
Willamette Valley	- All Willamette drainages.							
Southwestern	- Umpqua, Rogue and Williamson drainages.							
South-Central	- Sprague, Lost and Interior Basin drainages.							

a - Preliminary analysis furnished by U. S. Weather Bureau.

Note - Precipitation shown in inches.

b - Departure from 10-year (1943-52) drainage división average.

. ٠. The following organizations cooperate in the Oregon snow survey work:

### STATE

Idaho Cooperative Snow Surveys

Nevada Cooperative Snow Surveys

Oregon Agricultural Experiment Station

Oregon State Engineer and corps of State Watermasters

Oregon State Highway Engineers

Soil Conservation Districts of Oregon

## FEDERAL

Cooperative Extension Service
Forest Service
Soil Conservation Service
Department of Commerce
Weather Bureau
Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Department of National Defense
Army Engineer Corps

Department of Agriculture

# PUBLIC UTILITIES

California-Pacific Utilities Company Pacific Power and Light Company Portland General Electric Company The California Oregon Power Company

#### MUNICIPALITIES

City of Baker City of La Grande City of The Dalles City of Walla Walla

## IRRIGATION DISTRICTS

Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
East Fork Irrigation District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users, Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warmsprings Irrigation District

#### PRIVATE ORGANIZATIONS

Amalgamated Sugar Company
The Crag Rats, Hood River, Oregon





# Federal - State - Private COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"





